Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Previously presented): A method for preparing carbon nanotubes or nitrogen-doped carbon nanotubes, comprising pyrolysis, in a reaction chamber, of a liquid containing at least one liquid hydrocarbon precursor of carbon or at least one liquid compound precursor of carbon and nitrogen consisting of carbon atoms, nitrogen atoms and optionally hydrogen atoms and/or atoms of other chemical elements and optionally at least one metal compound precursor of a catalyst metal, wherein said liquid is formed under pressure into finely divided liquid particles by a periodic injection system, and the finely divided particles, formed in this way, are conveyed by a carrier gas stream and introduced into the reaction chamber, where the deposition and growth of the carbon nanotubes or nitrogen-doped carbon nanotubes take place.

Claim 2 (Previously presented): The method of claim 1, wherein said injection system is an automobile heat engine injector.

Claim 3 (Previously presented): The method of claim 2, wherein the injection system is provided with a needle valve.

Claim 4 (Previously presented): The method of claim 1, wherein the nanotubes are regularly disposed or arranged in space, are generally aligned with respect to one another and are substantially perpendicular to the wall of the reaction chamber.

Claim 5 (Previously presented): The method of claim 1, wherein the nanotubes have a length of from a few micrometers up to a few millimeters.

Claim 6 (Previously presented): The method of claim 1, wherein said liquid hydrocarbon is selected from nonaromatic liquid hydrocarbons.

Claim 7 (Previously presented): The method of claim 6, wherein said liquid hydrocarbon is selected from C5 to C20 alkanes; C5 to C20 liquid alkenes; C4 to C20 liquid alkynes; and C5 to C15 cycloalkanes.

Claim 8 (Previously presented): The method of claim 1, wherein said liquid hydrocarbon is selected from optionally substituted C6 to C12 aromatic hydrocarbons.

Claim 9 (Previously presented): The method of claim 1, wherein said liquid compound consisting of carbon atoms, nitrogen atoms and optionally hydrogen atoms and/or atoms of other chemical elements is selected from liquid amines or nitriles.

Claim 10 (Previously presented): The method of claim 1, wherein said liquid is in the form of a solution of the metal compound precursor(s) of a catalyst metal in the liquid hydrocarbons(s) or in the liquid compound(s) consisting of carbon atoms, nitrogen atoms and optionally hydrogen atoms and/or atoms of other chemical elements.

Claim 11 (Previously presented): The method of claim 10, wherein said metal compound precursor of a catalyst metal is selected from the compounds consisting of carbon, hydrogen, optionally nitrogen and/or oxygen and at least one metal.

Claim 12 (Previously presented): The method of claim 1, wherein said metal compound precursor of a catalyst metal is selected from metal salts and organometallic compounds.

Claim 13 (Previously presented): The method of claim 12, wherein said metal salts are selected from metal salts in which the counterion of the metal consists of a heteroatom.

Claim 14 (Previously presented): The method of claim 12, wherein said metal salts are selected from metal nitrates, acetates, acetylacetonates and phthalocyanines.

Claim 15 (Previously presented): The method of claim 11, wherein said metal is selected from iron, cobalt, nickel, ruthenium, palladium and platinum.

Claim 16 (Previously presented): The method of claim 12, wherein said organometallic compound is selected from ferrocene, nickelocene, cobaltocene and ruthenocene.

Claim 17 (Previously presented): The method of claim 11, wherein the solution also contains one or more compound(s) promoting the growth of the carbon nanotubes or nitrogen-doped carbon nanotubes.

Claim 18 (Previously presented): The method of claim 11, wherein the concentration of the metal compound precursor of a catalyst metal in the solution is generally from 0.2 to 15% by mass.

Claim 19 (Previously presented): The method of claim 11, wherein the solution is a 2.5% by mass solution of ferrocene.

Claim 20 (Previously presented): The method of claim 1, wherein said liquid is in the form of a colloidal suspension of metal nanoparticles in said at least one liquid hydrocarbon or in said at least one liquid compound consisting of carbon atoms, nitrogen atoms and optionally hydrogen atoms and/or atoms of other chemical elements.

Claim 21 (Previously presented): The method of claim 20, wherein said metal nanoparticles are selected from nanoparticles of iron, nickel, cobalt, ruthenium, palladium, platinum and of their mixtures or their alloys.

Claim 22 (Previously presented): The method of claim 20, wherein one or more metal compound precursor(s) of a catalyst metal, as described in any one of claims 10 to 16, is (are) also dissolved in said colloidal suspension.

Claim 23 (Previously presented): The method of claim 1, wherein said finely divided liquid particles such as droplets have a dimension of from a few tenths of micrometers to a few tens of micrometers.

Claim 24 (Previously presented): The method of claim 1, wherein said injection system operates in pulses.

Claim 25 (Previously presented): The method of claim 24, wherein the number of pulses is from 0.96 to 1200 per minute.

Claim 26 (Previously presented): The method of claim 24, wherein the volume of liquid injected in each pulse is from 2 to 100 microliters.

Claim 27 (Previously presented): The method of claim 1, wherein the finely divided liquid particles such as droplets formed by the injection system are evaporated in an evaporation device before they are introduced into the reaction chamber.

Claim 28 (Previously presented): The method of claim 1, wherein the pyrolysis is carried out at a temperature of from 600 to 1100°C.

Claim 29 (Previously presented): The method of claim 1, wherein the pyrolysis is carried out for a time of from 5 to 60 min.

Claim 30 (Previously presented): The method of claim 1, wherein the pressure in the reaction chamber is a controlled pressure.

Claim 31 (Previously presented): The method of claim 1, wherein the liquid contains a metal compound precursor of a catalyst metal, and the deposition and growth of the nanotubes take place directly on the walls of the reaction chamber.

Claim 32 (Previously presented): The method of claim 1, wherein the deposition and growth of the nanotubes take place on a substrate placed inside the reaction chamber.

Claim 33 (Previously presented): The method of claim 32, wherein the liquid does not contain a metal compound precursor of a catalyst metal, and the substrate is provided with a catalyst deposit.

Claim 34 (Previously presented): The method of claim 32, wherein the liquid contains one or more metal compound precursor(s) of a catalyst metal, and the substrate may or may not be provided with a catalyst deposit.

Claim 35 (Previously presented): The method of claim 32, wherein the substrate is selected from quartz substrates, silicon substrates and substrates made of metal oxides.

Claim 36 (Previously presented): The method of claim 32, wherein the substrate is a fabric of carbon fibers or nitrogen-doped carbon fibers.

Claim 37 (Previously presented): The method of claim 33, wherein the catalyst deposit comprises one or more metals selected from transition metals and other metals.

Claim 38 (Previously presented): The method of claim 33, wherein the catalyst deposit is in the form of a thin film.

Claim 39 (Previously presented): The method of claim 33, wherein the catalyst is deposited discontinuously.

Claim 40 (Previously presented): The method of claim 39, wherein the catalyst deposit is in the form of a set of discrete entities.

Claim 41 (Previously presented): The method of claim 40, wherein the deposit is ordered and said discrete entities are arranged in the form of a network or pattern.

Claim 42 (Previously presented): The method of claim 32, wherein the substrate consists of a layer of nanotubes or a plurality of stacked layers of nanotubes.

Claim 43 (Currently amended): A device for carrying out a method for preparing carbon nanotubes or nitrogen-doped carbon nanotubes, comprising:

- a reaction chamber in which carbon nanotubes or nitrogen-doped carbon nanotubes are prepared by pyrolysis of a liquid containing at least one liquid hydrocarbon precursor of carbon or at least one liquid compound precursor of carbon and nitrogen consisting of carbon

atoms, nitrogen atoms and optionally hydrogen atoms and/or atoms of other chemical elements, and optionally at least one metal compound precursor of a catalyst metal;

- means for forming said liquid under pressure into finely divided liquid particles, for conveying said finely divided particles by a carrier gas stream and for introducing said finely divided liquid particles into the reaction chamber;

- wherein said means comprises a periodic injection system, said periodic injection system comprises an injection head and a connection ring, said connection ring includes a carrier gas intake component;

and wherein a side wall of the connection ring includes at least one carrier gas intake tube, said carrier gas intake tube opening into an annular groove surrounding the injection head of the injection system, wherein the annular groove is placed behind the injection head such that the carrier gas introduced at the at least one carrier gas intake tube surrounds the finely divided liquid particles without interfering with them .

Claim 44 (Cancelled).

Claim 45 (Previously presented): The device of claim 43, further comprising an evaporation device connecting the injection system to the reaction chamber.